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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,391	05/21/2001	James R. Milne	20381-22 (50P4047)	8905
22242	7590	09/19/2006	EXAMINER	
FITCH EVEN TABIN AND FLANNERY 120 SOUTH LA SALLE STREET SUITE 1600 CHICAGO, IL 60603-3406			YENKE, BRIAN P	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/862,391	Applicant(s) MILNE ET AL.	
	Examiner BRIAN P. YENKE	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment (17 Jul 06).
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02 August 06</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the amended claims have been considered but are moot in view new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2a. Claims 9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis et al., US 6,340,994, in view of Trovato et al., US 6,469,742.

Margulis discloses a digital video system which includes modules, such as input module 210 (meeting the claimed processing chassis) which includes an A/D conversion 3002, and output module 230 (meeting the claimed presentation chassis) (Fig 2, detail Figs 3-4 respectively) where the modules are connected to the system/each other via databus 250 (the claimed interface) (Fig 2), and wherein each module includes it's own databus 350, 450 respectively) for processing the received data including audio and video. Margulis also discloses that the system can be implemented in either hardware or software or some combination of fixed function, configurable logic or programmable hardware (col 23, line 41-44).

In light of the specification, wherein the applicant discloses removable modules being implemented in the digital modular television, the examiner will provide evidence of such, where it has been known to utilize/configure a television using modules (which may be replaced/upgraded as disclosed by applicant).

The examiner has cited numerous references—see attached PTO-892, however the examiner will rely on Trovato et al., (US 6,469,742) which discloses an upgradeable TV where the modules may be replaced manually. Trovato discloses that the modules may include video processing units (col 4, line 6-12), audio processing units, timer units, communication modules etc...

Therefore, it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify Margulis which discloses a modular design system which may be configurable/programmable in order to receive/output multiple signals, by utilizing replaceable/upgradeable modules as done by Trovato in order to provide the user the conventional ability of upgrading/replacing the system to suit the users needs/requirements.

Regarding the newly added limitation of global interface with technology-independent communication. Margulis discloses the use of interfaces/modules which use an high speed digital data transmission technique as that described in IEEE 1394 (i.e. plug-n-play, different modules/devices being able to communicate on the high speed data path). Also, as disclosed by applicant's own specification, this limitation is met by established standards such as DVI or EIA 861, thus since Margulis discloses the concept of interfacing using an established pattern such as 1394, the use of DVI or EIA-861 are standards available by the user/designer since each standard offers it's own advantages respectively, and the selection of such derives no unexpected results.

2b. Claims 1-8, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis et al., US 6,340,994, in view of Trovato et al., US 6,469,742 and Phillips et al., US 6,072,994.

In considering claims 1

Margulis discloses a digital video system which includes modules, such as input module 210 (meeting the claimed processing chassis) which includes an A/D conversion 3002, and output module 230 (meeting the claimed presentation chassis) (Fig 2, detail Figs 3-4 respectively) where the modules are connected to the system/each other via databus 250 (the claimed interface) (Fig 2), and wherein each module includes it's own databus 350, 450 respectively) for processing the received data including audio and video. Margulis also discloses that the system can be implemented in either hardware or software or some combination of fixed function, configurable logic or programmable hardware (col 23, line 41-44).

In light of the specification, wherein the applicant discloses removable modules being implemented in the digital modular television, the examiner will provide evidence of such, where it has been known to utilize/configure a television using modules (which may be replaced/upgraded as disclosed by applicant).

The examiner has cited numerous references—see attached PTO-892, however the examiner will rely on Trovato et al., (US 6,469,742) which discloses an upgradeable TV where the modules may be replaced manually. Trovato discloses that the modules may include video processing units (col 4, line 6-12), audio processing units, timer units, communication modules etc...

Therefore, it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify Margulis which discloses a modular design system which may be configurable/programmable in order to receive/output multiple signals, by utilizing replaceable/upgradeable modules as done by Trovato in order to provide the user the conventional ability of upgrading/replacing the system to suit the users needs/requirements.

Regarding the dedicated power sources for each module, the combination of Margulis and Trovato do not explicitly disclose as such.

However, the concept of providing separate power sources in separate modules is conventional in the art, as evidenced by Phillips et al., (US 6,072,994), which discloses that the use of separate power supplies for separate modules (col 33, line 33-47) can be utilized to isolate the components, thereby reducing noise.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Margulis/Trovato combination which discloses a replaceable/upgradeable module digital video processing system with Phillips by providing separate power to the components/modules for the noted advantages as stated above.

Regarding the newly added limitation of global interface with technology-independent communication. Margulis discloses the use of interfaces/modules which use an high speed digital data transmission technique as that described in IEEE 1394 (i.e. plug-n-play, different modules/devices being able to communicate on the high speed data path). Also, as disclosed by applicant's own specification, this limitation is met by established standards such as DVI or EIA 861, thus since Margulis discloses the concept of interfacing using an established pattern such as

1394, the use of DVI or EIA-861 are standards available by the user/designer since each standard offers it's own advantages respectively, and the selection of such derives no unexpected results.

In considering claims 2-3,

The combination above discloses a digital video system which interfaces with analog/digital audio and video signals.

In considering 4,

Margulis discloses an output processor 230 which is able to produce a high resolution image.

In considering claim 5,

Refer to the rejection of claim 1.

In considering claims 6, 8 and 12,

Margulis discloses that the display systems may be either LCD or CRT monitor systems.

In considering claim 7,

Margulis discloses that the system may receive image/data signals requiring the use of a tuner (not shown) or not (col 6, line 45-63).

In considering claims 10 and 13,

Margulis discloses the use of line-doubling (col 3, line 21-35), which is included in the DIP (processing module using IR 318).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703)305-HELP.

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800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

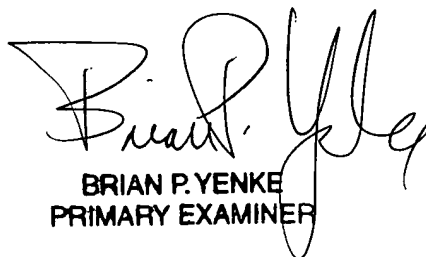
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Electronic Filing System (EFS). PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.



B.P.Y
17 Sep 2006



BRIAN P. YENKE
PRIMARY EXAMINER